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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Applicant:

Matthew Prince, et al.

Serial No.: 10/762,849

Filed: January 22, 2004

For: Reducing Wafer Defects from
Chemical Mechanical Polishing

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Art Unit: 3723

Examiner: Hadi Shakeri

Atty Docket: ITL.0941US
(P15694)

Assignee: Intel Corporation

Mail Stop **Appeal Brief-Patents**
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

REPLY BRIEF

This Reply Brief responds to the new arguments set forth in (10) Response to Argument.

The Examiner's Answer skirts the fundamental issue here that no one but the cited reference ever thickened a slurry used for chemical mechanical planarization. Because the cited reference thickens, it thereby distinguishes itself from everyone else in the art. At the time the application was filed there was no need to explain that the application was directed to an unthickened slurry because slurries are, by definition, in this field and for this purpose, unthickened. But an issue came up upon the citation of the reference that the claims could cover a thickened slurry as contemplated by the cited reference. Therefore, the claims were amended to make clear, which anyone skilled in the art would already understand, that the present application, that never mentioned the unusual step of thickening slurries, clearly meant an unthickened slurry.

Date of Deposit: June 6, 2007

I hereby certify under 37 CFR 1.8(a) that this correspondence is being deposited with the United States Postal Service as **first class mail** with sufficient postage on the date indicated above and is addressed to the Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

Cynthia L. Hayden

Certainly, it is odd to suggest, as the rejection does, that the word "unthickened" is unclear. It is clear and absolute. It says you do not thicken. Therefore, anybody skilled in the art would know what a thickened slurry is and what an unthickened slurry is.

The fact that the application uses the word "includes" in giving ingredients does not suggest to one skilled in the art that a thickening agent was added to the slurry. No one but the cited reference ever did such a thing and there is no reason to tell one skilled in the art not to thicken when conventional slurries are not thickened. The fact that open ended language is used in no way implicates the unlikely proposition that the slurry was thickened. Certainly, conventional slurries have silica and a basic pH solution. They do not have some thickening agent which thickens them beyond the normal viscosity associated with silica and a pH solution. Thus, one skilled in the art would not only understand that the present application would be considered as describing an unthickened slurry, but they would have no problem understanding what unthickened slurries include.

The suggestion that any slurry is thickened because of additives is certainly unsupported. Conventional slurries have the viscosity associated with what can only be described as a lack of thickening due to any viscosity modifying agent. The fact that lots of things could be added to change the viscosity of the conventional slurry, while unsupported by the Examiner's Answer, does not change the fact that no one ever added anything that had the effect of thickening existing slurries except for the one cited reference given all the art of record here. The only reference that talks about thickening got a patent on doing so. So there is no reason to believe that that is what is conventional. Moreover, the present application never even mentions the possibility of thickening and the present Applicant, like everyone else, would believe that conventional slurries are not thickened.

Certainly, the attempt to define "unthickened" as not having water soluble cellulose ether, as suggested on page 6, is unsupported. Certainly, any thickening agent would make the slurry thickened, as opposed to unthickened. The suggestion that it is unclear whether an unthickened slurry does not have viscosity modifying agents, whether they increase or reduce viscosity, is illogical. Certainly, if the slurry has viscosity reducing agents, it would certainly be hard for the Examiner to contend that it is thickened because it is thinner. Whether "unthickened" excludes slurries with high viscosity without additives is certainly an interesting point, but one we have no basis to ponder. Surely, with any word in the English language, one could propose a string of

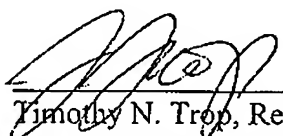
remote contingencies to suggest that somehow the phrase is indefinite. Certainly, "unthickened" is a clear and definite term. The suggestion that slurries could exist with high viscosity without additives is simply speculation without support. In other words, it is a possibility that does not exist. No legitimate issue exists with respect to the term "unthickened."

The other possibilities are similarly attempts to postulate extreme and unlikely situations. The suggestion that TMAH is a pH modifier that decreases the viscosity certainly would not, as described above, create an exclusion from "unthickened." Reducing the viscosity cannot make something less unthickened, while making it less thick. These are all strained efforts to create extreme possibilities which no reasonable person of ordinary skill in the art would ever be troubled with.

Certainly, the maintenance of a prior art rejection based on a reference which teaches thickening as its point of novelty is untenable and should be reversed.

Respectfully submitted,

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